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EXAMINER	
THOMAS, ERIC W	

ART UNIT	PAPER NUMBER
2831	

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/817,314	MITCHELL ET AL.	
	Examiner	Art Unit	
	Eric Thomas	2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 January 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-105* is/are pending in the application.

4a) Of the above claim(s) *57-64* is/are withdrawn from consideration.

5)☒ Claim(s) *21-26 and 65* is/are allowed.

6)☒ Claim(s) *1-20, 27, 29-36, 39-41, 44-47, 50-56, 66-89, 92-105* is/are rejected.

7)☒ Claim(s) *28,37,38,42,43,48,49,90 and 91* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 4-6, 39-40, 66-70, 73-75, 82-85, 102, 105 are rejected under 35 U.S.C. 102(b) as being anticipated by Andelmann (US 6,127,474).

Regarding claim 4, Andelman discloses an energy storage device product comprising: a self-supporting dry adhesive (see electrode materials) film comprising a dry mix of dry binder and dry carbon particles.

Regarding claim 5, Andelman disclose the self-supporting dry adhesive film is a compacted film (example 1).

Regarding claim 6, Andelman disclose the dry adhesive film comprises a thickness of less than 250 microns (col. 3 lines 15-20).

Regarding claim 39, Andelman discloses a capacitor comprising a plurality of dry processed particles, the dry processed particles including binder and carbon particles.

Regarding claim 40, Andelman discloses the dry processed particles are formed as a self-supporting dry electrode film, wherein at least some of the dry processed particles are compacted against the dry electrode film.

Regarding claim 66, Andelman discloses an energy storage device, comprising: one or more continuous self-supporting intermixed film structure comprising dry carbon

particles and dry binder particles, the film structure comprising about zero parts per million processing additive.

Regarding claim 67, Andelman discloses the additive is selected from the group consisting of hydrocarbons, high boiling point solvents, antifoaming agents, surfactants, dispersion aids, water, pyrrolidone, mineral spirits, ketones, naphtha, acetates, alcohols, glycols, toluene, xylene, and Isopars™.

Regarding claim 68, Andelman disclose the film structure comprises a dry adhesive binder.

Regarding claim 69, Andelman discloses the film comprises a dry conductive carbon.

Regarding claim 70, Andelman discloses the film structure comprises dry activated carbon, dry conductive carbon, and dry adhesive binder.

Regarding claim 73, Andelman disclose the intermixed film structure is an electrode film.

Regarding claim 74, Andelman disclose the electrode film is an energy storage device electrode film.

Regarding claim 75, Andelman disclose the electrode film comprises a capacitor electrode film.

Regarding claim 82, Andelman discloses an energy storage device structure comprising a self-supporting dry process based electrode film.

Regarding claim 83, Andelman discloses the film comprises conductive and adhesive particles.

Regarding claim 84, Andelman discloses the adhesive particles comprise a thermoplastic.

Regarding claim 85, Andelman discloses the electrode is a capacitor electrode.

Regarding claim 102, Andelman discloses an energy storage device comprising a plurality of intermixed dry processed carbon and binder particles formed into an electrode, wherein as compared to an electrode formed of a plurality of substantially similar carbon and binder particles processed with a processing additive the intermixed dry processed carbon and bonder particles comprise less residue (inherent features – same claim process and material – inherent feature).

Regarding claim 105, Andelman discloses an energy storage device comprising dry process based adhesive electrode means for providing adhesive electrode functionality in an energy storage device.

3. Claims 1-5, 8-13, 19-20, 27, 29, 35, 39-41, 45-46, 66-71, 73-75, 81-89, 92, 94-99, 101, 105 are rejected under 35 U.S.C. 102(b) as being anticipated by Sato et al. (EP 1,126,536).

Regarding claim 1, Sato et al. disclose an energy storage device comprising, a self-supporting film (fig. 1) consisting of a dry mix of dry carbon and dry binder particles (final product).

Regarding claim 2, Sato et al. disclose at least some of the dry mix is dry fibrillized (final product).

Regarding claim 3, Sato et al. disclose the dry mix comprises no processing additive (final product).

Regarding claim 4, Sato et al. disclose an energy storage device product comprising: a self-supporting dry adhesive (see electrode materials) film comprising a dry mix of dry binder and dry carbon particles (final product).

Regarding claim 5, Sato et al. disclose the self-supporting dry adhesive film is a compacted film (paragraph 58) (final product).

Regarding claim 8, Sato et al. disclose the adhesive film is directly against a substrate.

Regarding claim 9, Sato et al. disclose the self-supporting dry adhesive film comprises no processing additives (dry mix and the solvent vaporized).

Regarding claim 10, Sato el al. disclose the substrate comprises a collector (13).

Regarding claim 11, Sato et al. disclose the collector is aluminum (paragraph 57).

Regarding claim 12, Sato et al. disclose the product comprises a collector, and wherein the dry adhesive film is coupled to a surface of the collector.

Regarding claim 13, Sato et al. disclose the collector is untreated.

Regarding claim 19, Sato et al. disclose at least some of the dry binder comprises a fibrillizable flouoropolymer, and wherein the dry carbon particles comprise activated carbon particles and conductive carbon particles.

Regarding claim 20, Sato et al. disclose at least some of the dry binder comprises a thermoplastic, and wherein the dry carbon particles comprise activated carbon particles.

Regarding claim 27, Sato et al. disclose an electrode, the electrode comprising a self-supporting dry film including compacted dry binder and dry carbon particles.

Regarding claim 29, Sato et al. disclose a collector, wherein a first side of the dry film is coupled to the separator.

Regarding claim 35, Sato et al. disclose the dry film is a heated dry film.

Regarding claim 39, Sato et al. disclose a capacitor comprising a plurality of dry processed particles, the dry processed particles including binder and carbon particles (final product – paragraph 50).

Regarding claim 40, Sato et al. disclose the dry processed particles are formed as a self-supporting dry electrode film, wherein at least some of the dry processed particles are compacted against the dry electrode film.

Regarding claim 41, Sato et al. disclose a current collector, wherein the dry processed particles are bonded to the current collector, and wherein the current collector comprises aluminum.

Regarding claim 45, Sato et al. disclose an additive based electrode film, and wherein the dry processed particles are compacted against the additive base electrode film.

Regarding claim 46, Sato et al. disclose the claimed invention. The limitation, "by a single pass compaction device" is a method of forming the capacitor. The method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight. In re STEPHENS, WENZL, AND BROWNE, 145 USPQ 656 (CCPA 1965).

Regarding claim 66, Sato et al. disclose an energy storage device, comprising: one or more continuous self-supporting intermixed film structure comprising dry carbon particles and dry binder particles, the film structure comprising about zero parts per million processing additive.

Regarding claim 67, Sato et al. disclose the additive is selected from the group consisting of hydrocarbons, high boiling point solvents, antifoaming agents, surfactants, dispersion aids, water, pyrrolidone, mineral spirits, ketones, naphtha, acetates, alcohols, glycols, toluene, xylene, and Isopars™.

Regarding claim 68, Sato et al. disclose the film structure comprises a dry adhesive binder.

Regarding claim 69, Sato et al. disclose the film comprises a dry conductive carbon.

Regarding claim 70, Sato et al. disclose the film structure comprises dry activated carbon, dry conductive carbon, and dry adhesive binder.

Regarding claim 71, Sato et al. disclose the film structure is coupled to a collector.

Regarding claim 73, Sato et al. disclose the intermixed film structure is an electrode film.

Regarding claim 74, Sato et al. disclose the electrode film is an energy storage device electrode film.

Regarding claim 75, Sato et al. disclose the electrode film comprises a capacitor electrode film.

Regarding claim 81, Sato et al. disclose an electrode film, wherein the electrode film is both conductive and adhesive, and wherein the electrode film is coupled directly to a current collector.

Regarding claim 82, Sato et al. disclose an energy storage device structure comprising a self-supporting dry process based electrode film.

Regarding claim 83, Sato et al. disclose the film comprises conductive and adhesive particles.

Regarding claim 84, Sato et al. disclose the adhesive particles comprise a thermoplastic.

Regarding claim 85, Sato et al. disclose the electrode is a capacitor electrode.

Regarding claim 86, Sato et al. disclose a capacitor structure comprising a collector (13), and a plurality of dry particles, coupled to the collector.

Regarding claim 87, Sato et al. disclose the film comprises dry conductive carbon and dry adhesive materials.

Regarding claim 88, Sato et al. disclose the film comprises one or more blend of dry particles.

Regarding claim 89, Sato et al. disclose the first of the particles comprises activated carbon, conductive carbon, and a fibrillizable binder (PTFE), and wherein a second of the particles comprises conductive carbon, and adhesive binder.

Regarding claim 92, Sato et al. disclose the dry particles comprise conductive carbon, and a thermoplastic binder.

Regarding claim 94, Sato et al. disclose the film is self-supporting (maintains a thickness).

Regarding claim 95, Sato et al. disclose the adhesive material is thermoplastic.

Regarding claim 96, Sato et al. disclose an electrode comprising a collector; and an electrode film, wherein the electrode film is coupled to the collector, wherein the electrode film comprises dry conductive particles and dry binder particles, and wherein between the collector and the electrode film there exists only one distinct interface.

Regarding claim 97, Sato et al. disclose the binder particles are thermoplastic.

Regarding claim 98, Sato et al. disclose the conductive particles are carbon.

Regarding claim 99, Sato et al. disclose the film further includes activated carbon.

Regarding claim 101, Sato et al. disclose an energy storage device, the electrode comprising: adhesive binder particles; and carbon particles, the carbon particles comprising a surface, wherein a plurality of the carbon particles are coupled to each other by the adhesive binder particles, and wherein a plurality of the carbon particles make direct carbon particle to carbon particle contact.

Regarding claim 105, Sato et al. disclose an energy storage device comprising dry process based adhesive electrode means for providing adhesive electrode functionality in an energy storage device.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 7, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andelmann (US 6,127,474).

Andelmann discloses the claim invention except for the dry adhesive film comprises a length of at least 1 meter.

Since, it is well known in the art to form a film having a particular length that is based on mechanical and electrical design considerations, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the length of the adhesive film having a length of at least 1 meter, since it is known in the art

to form a film having a length based on design considerations and such a modification would have involved a mere change in the size of a component, a change in size is generally recognized as being within the level of ordinary skill in the art. *In re. Rose, 105 USPQ 237 (CCPA 1955).*

Regarding claim 44, Andelmann discloses the claimed invention except for the capacitor is rated to operate at a maximum voltage of 3.0 volts or less.

Since, it is well known in the art to form a capacitor having a particular rated maximum voltage (by using particular electrolyte, thickness of the electrode, etc.) that is based on electrical design considerations, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the capacitor to having a maximum operation voltage of 3.0 Volts, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

7. Claims 36, and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (EP 1,126,536).

Sato et al. disclose the claimed invention except for the film comprises a density of about 0.50 to 0.70 g/cm^2.

Since, it is well known in the art to form a film having a particular density that is based on mechanical and electrical design considerations, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the film having a density of .60 g/cm^2, since it has been held that discovering an optimum value

of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 93, Sato et al. disclose the claimed invention except for film is at least 5 meters.

Since, it is well known in the art to form a film having a particular length that is based on mechanical and electrical design considerations, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the length of the film having a length of at least 5 meter, since it is known in the art to form a film having a length based on design considerations and such a modification would have involved a mere change in the size of a component, a change in size is generally recognized as being within the level of ordinary skill in the art. *In re. Rose, 105 USPQ 237 (CCPA 1955).*

8. Claims 76-79, are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (EP 1,126,536) in view of Evans (US 4,992,910).

Sato et al. disclose a collector (13) having a surface; an electrolyte disposed in the capacitor and an electrode film (181), wherein the film is impregnated with the electrolyte and wherein the electrode film is coupled directly to the surface.

Sato et al. disclose the claimed invention except for the energy storage device comprising a housing.

Evans teaches the use of a housing that contains multiple electric double layer capacitors (see fig. 1).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made form the electric double layer capacitor of Sato et al. in a housing as taught by Evans, since such a modification would protect the electric double layer capacitor from an external environment.

Regarding claim 77, Sato et al. disclose the electrode film is substantially insoluble in the electrolyte (materials).

Regarding claim 78, Sato et al. disclose the electrode comprises a dry adhesive binder, wherein the binder is insoluble in the electrolyte.

Regarding claim 79, Sato et al. disclose the adhesive binder comprises a thermoplastic, and wherein the thermoplastic couples the electrode film to the collector.

9. Claims 14-18, 30-34, 47, 50-56, 72, 103-104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (EP 1,126,536) in view of Yoshida et al. (US 5,150,283).

Regarding claim 14, Sato et al. disclose the claimed invention except for a second self-supporting dry adhesive film is formed directly against a second side of the capacitor.

Yoshida et al. teach (fig. 1) that it is known in the electric double layer capacitor art to form electrodes on both sides of a current collector wherein the current collector/electrodes are wound and form within a casing.

It would have been obvious to a person of ordinary skill in the art to form a second dry adhesive film on the second side of the current collector, since such a modification would improve the electrical properties of the capacitor.

Regarding claim 15, Sato et al. disclose the claimed invention except for the collector is treated.

Yoshida et al. teach that it is known in the electric double layer capacitor art to treat a current collecting member to increase the surface area.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to treat the current collector of Sato et al, since such a modification would increase the surface area.

Regarding claim 16, Yoshida et al. teach that the collector is formed to comprise a roll.

Regarding claim 17, Yoshida et al. teach that the roll is disposed within a sealed aluminum housing.

Regarding claim 18, Yoshida et al. teach that within the housing is disposed an electrolyte and wherein the product comprises a double-layer capacitor.

Regarding claim 30, Sato et al. disclose the invention except for the second side of the dry film is coupled to a separator.

Yoshida et al. teach (fig 4) a compact electric double layer capacitor comprising a current collector (46), electrode (42) and separator (41). The second side of the electrode is coupled to a separator.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the second side of the dry film coupled to a separator, since such a modification would form a compact electric double layer capacitor (reduced thickness).

Regarding claim 31, Sato et al. disclose the dry binder comprises a heated thermoplastic.

Regarding claim 32, Sato et al. disclose the dry carbon particles comprise conductive carbon particles.

Regarding claim 33, Sato et al. disclose the dry binder comprise a dry flouoropolymer.

Regarding claim 34, Sato et al. disclose the dry carbon particles comprise dry conductive carbon particles and dry activated carbon particles.

Regarding claim 47, Sato et al. disclose the claimed invention except for the capacitor comprising an aluminum sealed housing.

Yoshida et al. teach that it is known in the electric double layer capacitor art to form a capacitor within an aluminum sealed housing.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the electric double layer capacitor within a sealed aluminum housing, since such a modification would provide protection for the capacitor.

Regarding claim 50, Sato et al. disclose a capacitor comprising an electrode film attached on one side of a current collector having two sides.

Sato et al. disclose the claimed invention except for a second electrode film attached to the second side of electrode layer.

Yoshida et al. teach (fig. 1) that it is known in the electric double layer capacitor art to form electrodes on both sides of a current collector wherein the current collector/electrodes are wound and form within a casing.

It would have been obvious to a person of ordinary skill in the art to form a second dry adhesive film on the second side of the current collector, since such a modification would improve the electrical properties of the capacitor.

Regarding claim 51, Sato et al. disclose the films layer consists of no processing additives (dry and vaporized)

Regarding claim 52, Sato et al. disclose that the two electrodes comprise a thermoplastic.

Regarding claim 53, Sato et al. disclose the film layer comprise substantially no residues before impregnation of the electrolyte (inherent feature – solvent is vaporized – dry).

Regarding claim 54, Sato et al. disclose the residues comprise hydrocarbons, high boiling point solvents, antifoaming agents, surfactants, dispersion aids, water, pyrrolidone, mineral spirits, ketones, naphtha, acetates, alcohols, glycols, toluene, xylene, and Isopars™.

Regarding claim 55, Sato et al. disclose the layers are impregnated with an electrolyte.

Regarding claim 56, Sato et al. disclose the capacitor comprises a double layer capacitor.

Regarding claim 72, Sato et al. disclose the claimed invention except for a second of the film structure is formed directly against a second side of the collector.

Yoshida et al. teach (fig. 1) that it is known in the electric double layer capacitor art to form electrodes on both sides of a current collector wherein the current collector/electrodes are wound and form within a casing.

It would have been obvious to a person of ordinary skill in the art to form a second dry adhesive film on the second side of the current collector, since such a modification would improve the electrical properties of the capacitor.

Regarding claim 103, Sato et al. disclose a continuous compacted self-supporting dry adhesive electrode film comprised of a dry mix of dry carbon and dry bonder particles, the film coupled to a collector.

Yoshida et al. teach (fig. 1) that it is known in the electric double layer capacitor art to form electrodes on a current collector wherein the current collector/electrodes are wound and placed within a casing.

It would have been obvious to a person of ordinary skill in the art to form the electrode on a current collector, wherein the electrode/collector are wound and placed in an aluminum housing, since such a modification would improve the electrical properties of the capacitor.

Regarding claim 104, Sato et al. disclose the dry adhesive electrode comprises no hydrocarbons, high boiling point solvents, antifoaming agents, surfactants,

dispersion aids, water, pyrrolidone, mineral spirits, ketones, naphtha, acetates, alcohols, glycols, toluene, xylene, and Isopars™.

Claims 76-79, are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (EP 1,126,536) in view of Evans (US 4,992,910).

Sato et al. disclose a collector (13) having a surface; an electrolyte disposed in the capacitor and an electrode film (181), wherein the film is impregnated with the electrolyte and wherein the electrode film is coupled directly to the surface.

Sato et al. disclose the claimed invention except for the energy storage device comprising a housing.

Evans teaches the use of a housing that contains multiple electric double layer capacitors (see fig. 1).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made form the electric double layer capacitor of Sato et al. in a housing as taught by Evans, since such a modification would protect the electric double layer capacitor from an external environment.

Regarding claim 77, Sato et al. disclose the electrode film is substantially insoluble in the electrolyte (materials).

Regarding claim 78, Sato et al. disclose the electrode comprises a dry adhesive binder, wherein the binder is insoluble in the electrolyte.

Regarding claim 79, Sato et al. disclose the adhesive binder comprises a thermoplastic, and wherein the thermoplastic couples the electrode film to the collector.

10. Claim 80 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (EP 1,126,536) and Evans (US 4,992,910) as applied to claim 78 above, and further in view of Wani (US 5,682,288).

Sato et al. disclose the claimed invention except for the electrolyte is an acetonitrile type of electrolyte.

Wani teaches that acetonitrile type electrolyte is a well-known electrolyte used in the capacitor art.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an acetonitrile electrolyte in the capacitor of Sato et al, since such a modification would provide an electrolyte having good electrical conductivity.

11. Claim 100 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (EP 1,126,536) in view of Saito et al. (US 5,706,165).

Sato et al. disclose the claimed invention except for the conductive particles comprise a metal.

Saito et al. teach that it is common in the electric double layer capacitor art to use a metal conductive agent in an electrode.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the electrode of Sato et al. using a conductive metal filler (not carbon) as taught by Saito et al., since such a modification would improve the electroconductivity of the electrode.

Allowable Subject Matter

12. Claims 21-26, 65 are allowed.

13. Claims 28, 37-38, 42-43, 48-49, 90-91 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The following is a statement of reasons for the indication of allowable subject matter: The prior art does not teach or suggest (taken in combination with the other claimed features) an energy storage device consisting of a dry fibrillized mix of dry binder and dry carbon particles formed into a continuous self-supporting adhesive electrode film (Claims 21-26).

Response to Arguments

15. Applicant's arguments filed 1/23/06 have been fully considered but they are not persuasive.

In response to applicant's argument that Andelman does not teach of a self-supporting film, Andelman discloses the self-supporting film has a tensile strength of 1.0 kg-cm, and appears to be self-supporting due to the handling of the film during stages of component construction.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a minimal binder with carbon particles) are not recited in the rejected claim(s).

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that the Sato et al. reference does not disclose the claims that require dry carbon and dry binder particles, it is noted that the final product of Sato et al. reference has the same final product of the applicant's claimed invention. The method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight. In re STEPHENS, WENZL, AND BROWNE, 145 USPQ 656 (CCPA 1965)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Thomas whose telephone number is 571-272-1985. The examiner can normally be reached on Monday - Friday 6:30 AM - 3:45 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ewt

5/1/06

ERIC W. THOMAS
PRIMARY EXAMINER